
Department of Clinical Immunology and Allergology

We provide teaching of immunology within the Master's degree programmes of general and dental medicine at the Faculty of Medicine of Charles University in Hradec Králové (CU MED HK) in Czech and English. The department is accredited for the doctoral programme of Medical Immunology, for habilitation and appointment proceedings as a professor in this field. It is a training centre for physicians training in allergy and clinical immunology. Internships of staff in clinical laboratories and internships of biomedical study programmes of the Faculty of Pharmacy of the Charles University and the University of Pardubice are carried out here.

Clinical and Laboratory Diagnosis of Immunity Disorders

We provide diagnostic and therapeutic care for patients with allergic diseases and immune disorders. We use devices for functional diagnostics. Our clinical laboratory has all the laboratory procedures necessary for diagnostic decision-making by physicians of all disciplines. The mainstay technology is multicolor flow cytometry and various immunochemical methods, especially ELISA techniques, immunofluorescence, immunoblotting and the newly introduced luminex technology. We culture and analyse cell cultures for diagnostic and research purposes.

All about inflammation

The Department of Clinical Immunology and Allergology has been conceived from the very beginning as an academically oriented department with research as its integral focus. Research programs are implemented at the department, which study both defensive and damaging inflammation. Attention is paid to allergic inflammation. In cooperation with the staff of the Department of Cardiac Surgery of CU MED HK, the dynamics of the inflammatory reaction induced by cardiac surgery is studied. In collaboration with the experts of the Department of Obstetrics and Gynecology of CU MED HK, the contribution of inflammation to the pathogenesis of premature rupture of amniotic sacs is studied. In both areas, priority findings have been achieved and published. The staff of the Department of Clinical Immunology and Allergology is involved in the implementation of research topics from different departments of the University Hospital Hradec Králové. Among the many, we select the long-standing activity in haematooncology, the influence of immunity by apheresis procedures, the study of damaging inflammation in rheumatology, gastroenterology, dentistry, dermatology and infectious medicine.